Delta Operations for Salmonids and Sturgeon (DOSS) Group

9/14/10, 9:00 a.m. call

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon. DOSS will coordinate the work of other technical teams. DOSS notes and advice can be found at: http://swr.nmfs.noaa.gov/ocap/actions.htm

Attendees:
DWR: Mike Ford, Carol Stroble, Andy Chu; Angela Llaban, Brian Schreier
USFWS: Nick Hindman, Roger Guinee,
NMFS: Bruce Oppenheim, Barbara Byrne; Barbara Rocco; Garwin Yip, Jeff Stuart
USBR: Josh Israel, Thuy Washburn
SWRCB: Kari Kyler
DFG: Dan Kratville
EPA: Herbold.Bruce

Add Scott Cantrell and Carl Wilcox (DFG), and Garwin Yip (NMFS) to DOSS distribution list.

Agenda: fish monitoring, Delta water operations

*Steelhead info from Mokelumne River for October – additional data

Fish Monitoring:

Mill and Deer Creeks:
Have not heard whether they are up and running. Most likely they will begin in early to mid-October.

Knights Landing:
Don't know whether it is up and running; most likely not. Usually starts in October.

Delta Monitoring—DAT report from J. Speegle, USFWS. Sheila Greene, DWR, is no longer involved. Have not heard when the DAT calls will start up.

No WOMT scheduled for next week yet; has been on an as-needed basis. Data is still being reported for the DAT calls from USFWS.

Salvage Data: DFG has new website which provides both current and historical salvage data at http://www.dfg.ca.gov/delta/apps/salvage/Default.aspx with nice calendar format for full list of salvage at both facilities. Over summer, some adult Chinook salmon were caught (8/28) and we are still catching delta smelt. There was not much caught in Chipps Island. No juveniles were caught through summer and no species of concern were captured in trawling nets. A few splittail were captured in the beach seines; some delta smelt were also captured but no salmonids. The salvage facilities did see high numbers of threadfin shad in early September. Suggestions for DFG salvage website should be sent directly to Geir Aasen.

The website was set up at two levels of navigation for people interested—one that would be more detailed and one for general-public queries. Daily data was set up by DFG—improved data that DOSS should access to get information.

Monitoring: The Stanislaus weir went in on the 7th. We have seen some Chinook come up the Stanislaus River; however, more spring-run probably go up the Stanislaus.

Merced is running a lot of water right now (high flows) and might bring in fish. The San Joaquin River is running high. There was a scheduled release of Merced River flows (combined FERC study and water transfer for licensing); there will be a 7- to 10-day pulse. Short release for about 1,500 acre-feet (af) for 3 days (peaked out). The FERC study is part of relicensing on the Merced River and is the primary motivation for releasing that water. Transferring about 1,500 af from Merced Irrigation District (ID) to Westland Water District and evaluating it from a fishery perspective as part of preparation for relicensing.

FWS Sampling Data:

Beach Seines (including Liberty Island) (8/29–9/4): 2 late-fall run salmon & 3 splittail

Sacramento Midwater Trawls (8/29–9/4): No species of concern

Chipps Island MidwaterTrawls (8/29–9/4): 1 splittail; 5 delta smelt

Mossdale Kodiak Trawls (8/29–9/4): No species of concern

Stanislaus Weir: (9/11–9/12): 2 Chinook caught upstream and 1 caught downstream of weir

Operations:

CVP:
Keswick: released 7,500 cubic feet per second (cfs); reducing another 500 cfs in a few days
American: 1,500 cfs
Goodwin: 200 cfs
Jones: 4,100 cfs; Banks fed 1,000 cfs
Federal San Luis storage: 334,000 af
Shasta: 3.382 MAF
Folsom: 638,000 af (approx. 60%)

If demands drop off, we expect to gain in the San Luis share of flows this week.

SWP:
Oroville: 6,500 cfs, 1.88 MAF (about half full)
Sac flow is running about 18,000 cfs
San Joaquin: about 2,473 cfs (probably peak, based on peak Merced release over the weekend)
Outflow: close to 7,000 cfs; EI ratio about 54%
Banks: 7,180 cfs
San Luis: 438,000 af – still dropping. Municipal use continues.

Red Bluff Diversion Dam Gates: Came out at the end of August. Note: Earlier than the biological opinion (BO) specified because of construction of new pumping plant.

Annual Review/Report

There is an annual review scheduled for November 3 & 4 for the NMFS and USFWS BOs. It will be an independent scientific panel and will include review of the following technical teams: DOSS, Stanislaus River Ops Group, Clear Creek Tech. Team, American River Ops Group, and Sacramento

River Temperature Task Group. We need to have the annual report for DOSS done for the review. We sent out an email to get biologists to work on report. This needs to be done by October 8th to have enough time for reviewers to actually look at it. We will start working on it with the DWR fish data. NMFS will summarize the DOSS summaries—weekly notes (32 weeks of DOSS reports). We will need to combine and come up with what did and did not work as far as recommendations, fish triggers, etc., and the entire team needs to review that part; we would like a smaller group to help put the report together. Angela is working on the salvage information. Barbara R. is working on notes. We will come up with a meeting date to get more of the report combined. Only two people responded to my email—both declined. Nick will help out. Dan will be available to review. Sheila will try to finish notes on fish triggers. I will put out an email with dates for next products—should be done within next 3 weeks.

Delta Cross Channel (DCC) Gates Closure

EBMUD went to the B2IT group. Once USBR we got the request, they looked at what things could affect request: water quality might deteriorate. We asked DWR to model this; this was a request from EBMUD. EBMUD wanted to reduce pulse flow to attract fish—wanted DCC closed. Typically from mid-September on, water quality can be problematic. The result of the modeling indicated an impact close to 240,000 af on project. We have not incorporated Merced or other transfer water. Merced is small pulse; it doesn't last that long but this won't change the decision. This past weekend, tidal dynamics brought electrical conductivity (EC) up. These were controlled conditions because it does not rain much; closing gates causes water quality issue. There would be a big impact if it stays dry and doesn't rain. This past weekend we monitored Jersey, Bethel, Holland, and Bacon—all reached an EC (total salts) level of concern; chloride is rising enough for us to watch closely. Contra Costa is significantly affected by the DCC closure. Modeling is focused on EC – EC-to-chloride ratio. It cannot exceed the 250/ml level. Chlorides are coming in from the ocean. The blend is measured by EC. At any location in the Delta, one is more affected by EC; the other by salts. Risk assessment: DWR should determine whether EC could be exceeded with gates closed and whether the flow from the Mokelumne R would offset the water quality issue?

Bottom line is that the standard is chlorides, not EC. Closing gates creates more reverse flow, bringing more ocean salts (Cl and Br). Several questions were raised about the modeling data:

1. Does model show contributions from Mokelumne? Pulse flow comes down regardless; model compared with DCC gates open and closed.

2. Third scenario: could we model water quality with gates open with no flows? Flows will take place with our without DCC gates open or closed.

3. Could we show benefit of flows? If pulse flow is not there, we have to manage water quality by releasing or cutting back from upstream.

About 25,000 af will be curtailed if gates are closed. Model measures EC and compares it to chloride standard set up by DWR. Chloride standard will be violated at Contra Costa. San Joaquin input is close to 1,600 cfs compared to Sacramento River flow—10,000 cfs range—majority of the EC has to come from the ocean. With gates open now, we already see water quality problems.

Operations might be limited by Contra Costa operations. Today the measurement is 120 ml and the standard is 250 ml.

We recommend that the gates not be closed in October based on water quality cost. In the past, we have done similar gate closures but could use AR; is not available now. If we close the gate, we will definitely run into water quality problems and will need to increase exports. There is also more water

quality degradation during the second half of the month. Need to cover risk; we are treating modeling numbers more real than they are.

Project operators are not optimistic; will there be another round or decision point later? Delta Stewardship Council is meeting today and will talk about the Mokelumne River. The DOSS team will make a decision and recommendation; however, any recommendation to WOMT would be premature at this time. WOMT should meet next week (21st) to discuss real-time operations. Andy: send email to confirm.

There was a gate-closure discussion; operators were concerned about chloride standard but no change in inclination to close or not close gates. One thing we heard was that some presuming that the reason for not closing the gates was related to delta smelt. Probably 3 weeks ago—discussion regarding the impact on delta smelt. Didn't seem as though smelt would be affected by DCC closure; yesterday there was more traffic on the subject. Delta smelt people will provide more information to us. DCC closure would increase reverse flow on the San Joaquin River—might be some sensitivity at that point. We will get the answer soon. At the time of the B2IT call, smelt people were not concerned.

Number of adults seen in October; some benefit to steelhead and fall-run Chinook. EBMUD says that this would not occur every year; the run is low on the Mokelumne so they want to do it this year. We do have the water quality cost to consider; if that condition is not met, any closure will affect water quality more. NMFS BO states (pg 636) Oct 1 to Nov 30—action triggers. What to do with DCC gates. Third scenario, if the catch index trigger is met but there are water quality problems, costs and benefits will be considered and recommended. We could you release more water to cover that "cost"; however, that would also be a cost. We could reduce exports; however, we would need to export to meet water quality standards.

Look at Bethel, Holland, and Jersey—numbers (1.8 yesterday) are creeping up. Operators are looking at this and planning for action. We're doing this for rest of fall, not just this month. DCC closure request is as of Oct 4; a number of questions arose:

1. Is there enough predictability that on the 28th WOMT meeting, there would be an EC threshold?
2. Could we recommend by that time to close or not close?
3. Are we willing to accept the cost and at what threshold?

If there are any impacts, USBR is not willing to continue the experiment. Earlier closure of DCC is proposed; we don't have a good sense of any benefits. Even though NMFS has a study plan over three periods, the information will be useful because it is hypothesized that there's a significant benefit. We anticipate a fish study will be done by next spring. We will tag fish regardless of closure, which will help greatly on future decision making on this issue.

We should not continue with this action if there is any risk of cost. We're seeing these costs about 15 days earlier than expected. Water quality is worse that we had modeled. Accretion (output) is getting better but does not help water quality in the interior Delta. Risk question is valid but we will know more later. Makes sense for B2IT to have more discussions about the risk.

Would like to see more experimental conditions instead of hard, fast EC/Cl only—more roadblocks down the road and USBR is anxious about whether it will work. Should continue to look at real-time data and monitor; maybe more numbers to look at and set some standards at that point to decide to continue with experiment. It may rain, which would change the data.

Action item for WOMT agenda on 21st and line up for a decision on the 28th.

Rock Barrier:

The barrier did not go in last year; DFG must request it. If would be done only if they detected that dissolved oxygen (DO) on that stretch of the San Joaquin River was <5. They would install a rock barrier at that point; based on attracting migrating fish. DFG had not made a request as of a few days ago. Flow and DO are indicators but flow affects DO. We sent an email to DFG asking them to look into it and why it was not implemented. Last year, we started the October pulse on the Stanislaus River that contributed to a bit higher flows on the San Joaquin River, which improved DO in the ship channel. If we do the same, maybe there's no need any longer. There is concern that fall run numbers are low on the San Joaquin. DWR does not want to do because it's expensive; NMFS says there's sufficient outflow and it's not needed at this point. Benefit vs. cost must be considered. Keep the DOSS group apprised.

Aerator in port of Stockton: new aerator makes DO look better now than in the past. But there are two reasons for a barrier: in spring, it keeps fish going downstream from channel; in fall, it keeps adults going up.

Timing on taking out agricultural barriers: do they need to pull the ag barriers early if the rock barrier are placed? Not a concern this year. Adult Chinook are going up the Stanislaus so they're not having a problem right now; not sure which way they're coming. Confer with USFWS and NMFS on it.

Update on Stanislaus Fish Study

Doug Demko and Oakdale irrigation district (OID) proposed release up to 1,000 cfs in September and call it a "fish study". OID and San Joaquin still have some extra water for the year. Proposed additional water released down the Stanislaus R. OID and South San Joaquin ID asked that more water be released in October—current release is 200 cfs—request an addition 800 cfs beginning on 9/9 – 9/30. NMFS had been contacted in advance; had an ad hoc call to discuss pros and cons, effects on DO and flow. In general, discussed data—benefits were questionable. Temperature was a question; DO is pretty good; might not be that much of a difference. NMFS' understanding was that we would take request under advisement but we're declining the change order as of the 9th. We don't know whether they are still considering it. There is a meeting today to make a decision to make the release; we're talking with the USBR. There's another board meeting on Thursday with a different water group; we won't hear anything back until Thursday afternoon. OID and South San Joaquin will decide with the USBR. USBR will not make release order. If they choose to release without our change order, we cannot do anything about it. Should not change release without USBR action.

DOSS was not aware of this study, and had no information. USBR will meet with OID to discuss when the water could be better used. They were not willing to wait. They will meet Thursday and get back to us.

The OID proposal is not a transfer, it's just a release. DOSS should not quote that this is beneficial to fish; it's just a release increase, but wait until October if possible; timing is better to coordinate with other increases.

Next meeting: 9/21/10 at 9:00 am. Same number and code.